

5035

Diag. Cht. No. 8551-2

Form 504 Ed. June, 1928	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY R. S. Patton, Director	
State: <u>S.W. Alaska.</u>	
<div style="border: 1px solid black; padding: 5px; display: inline-block;">G. & G. SURVEY L. & A. NOV - 5 1930 Acc. No.</div>	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Sheet No. 1 5035
LOCALITY Orca Inlet <u>Cordova, Alaska.</u>	
19 <u>30.</u>	
CHIEF OF PARTY <u>L.D. Graham</u>	

5035

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

U. S. COAST & GEODETIC SURVEY
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Acc. No. _____

REG. NO.

5035

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 1

REGISTER NO. **5035**

State Southwest Alaska.

General locality Orca Inlet.

Locality Cordova.

Scale 1 - 10,000 Date of survey October 1 & 2, 1930.

Vessel Motor Vessel WESTDAHL.

Chief of Party L.D. Graham.

Surveyed by L.D. Graham.

Protracted by R.A. Earle.

Soundings penciled by R.A. Earle.

Soundings in ~~feet~~ feet

Plane of reference Mean Lower Low Water.

Subdivision of wire dragged areas by _____

Inked by _____

Verified by _____

Instructions dated August 18, 1930.

Remarks: Tender WESTDAHL working in conjunction with U.S.S.

DISCOVERER: F.B.T. Siems, Commanding.

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC

SHEET

NO. 1

October 1 & 2, 1930.

Cordova, Alaska.

Motor Vessel WESTDAHL

L.D. Graham, Commanding.

Scale : 1 - 10,000

A. Date of Supplemental Instructions

August 18, 1930.

B. Survey methods :

All soundings were obtained with a twelve pound lead and standard No. 8 leadline.

Old triangulation stations were readily recovered and from these a few prominent objects were cut in as hydrographic signals.

No changes, regarding wharves, landmarks, etc., which would be of navigational importance, were noted.

Tidal data was obtained by staff readings taken every half hour during the period of sounding. The staff was that of the standard gauge located at the City Dock, Cordova, Alaska.

C. Comparison with previous surveys :

The northeast side of Odiak Channel has not changed appreciably; however, the channel is approximately 125 meters narrower due to the shoaling of the southwest side. The controlling depth in the channel is still 19 feet.

C. Comparison with previous surveys : (Continued.)

The bottom has changed a great deal around the shoal to the southward of Odiak Channel. A new channel, approximately 350 meters in width, has cut its way between said shoal and Grass Island, the controlling depth of same being 18 feet. The least depth on the shoal is now two feet instead of the four feet shown on the chart.

An examination was made of the reported 26 foot spot lying to the east of Buoy N 10, and no indication of it could be found.

D. <u>Statistics</u> :	"A" Day.	"B" Day.	Total.
Date.	Oct. 1, 1930.	Oct. 2, 1930.	
Volume.	One.	One.	
Soundings.	586	299	867
Positions.	122	74	196
Statute miles hydrography.	20.1	9.7	29.8
Area covered - (sq. stat. mi.)			1.7

Approved: *L.D. Graham*
H. & G. Engr.

L.D. Graham
L.D. Graham
H. & G. Engineer.

STATEMENT OF
INSPECTION AND APPROVAL.

Hydrographic Sheet No. 1 and all accompanying records of
Odiak Channel, Cordova, Alaska, have been inspected and are
hereby approved.

October 23, 1930.

J. D. Liem
Chief of Party.
L. D. Graham

L.D. Graham

Chief of Party.

Section of Field Records

lcm
zac.

November 10, 1930

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in

1 volumes of sounding records for

HYDROGRAPHIC SHEET 5035

Locality Alaska (Orca Inlet)

Chief of Party: L.D. Graham, in 1930

Plane of reference is mean lower low water, reading

2.4 ft. on tide staff at Cordova

44.2 ft. below B. M. 1

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

Chief, Division of Tides and Currents.

Report on sheet No. H-5035

Chief of Party: L. D. Graham

Surveyed by: L. D. Graham

Projected and soundings plotted by R. A. Earle

Verified and inked by G. H. Streeter

1. The records conform to the requirements of the General Instructions.
2. The plan and character of development fulfill the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific Instructions.
4. With one exception no sounding line crossings were taken.
5. The usual depth curves could be drawn.
6. The field plotting is complete.
7. Office draftsman did not have to do over any part of drafting done by field party.
8. The junction with adjacent sheets is satisfactory.
9. No further survey is necessary.
10. The shore line was transferred from H-4715.
Attention is called to a six-foot sounding

350 meters northeast of "Grass". There is no record as to the certainty of this depth altho the Boat Sheet and Sounding Records agree.

11. The character and scope of the surveying is good.
The quality of the field drafting is fair.

Respectfully submitted
Gaylord H. Street

Nov. 15, 1930.

Section of F.R.
Report on Hyd Sh. 5035

Orea Inlet, Alaska

Surveyed in 1930

Inspection dated Aug 18, 1930 (Dinner)

1. The records, as well as the plan & character of the survey conform to the requirements
2. The sounding line crossings are satisfactory and the depth curves can be completely drawn.
3. The specific instructions have been complied with.
4. Two 26 foot soundings from H. 2940 (1908) northwest of Δ Bol, lie within the close development on H. 5035. This development shows no indication of shoaling. An examination of the original records of H. 2940 discloses the fact that the 26 foot soundings were erroneously plotted and they have been expunged from the sheet. They should, therefore be omitted from the charts.
5. With the exception of a shoaling which appears to have taken place within the past year at $60^{\circ} 33.8'$, $145^{\circ} 45.9'$, the agreement with H. 4915 is excellent and the latter sheet, which is rated as a reconnaissance, may be considered of standard accuracy and be used for charting.

H. 5035 - 2

6. Additional development at the southern entrance to Odiak Channel would have been desirable.

Otherwise the development throughout the area covered by the survey is sufficient.

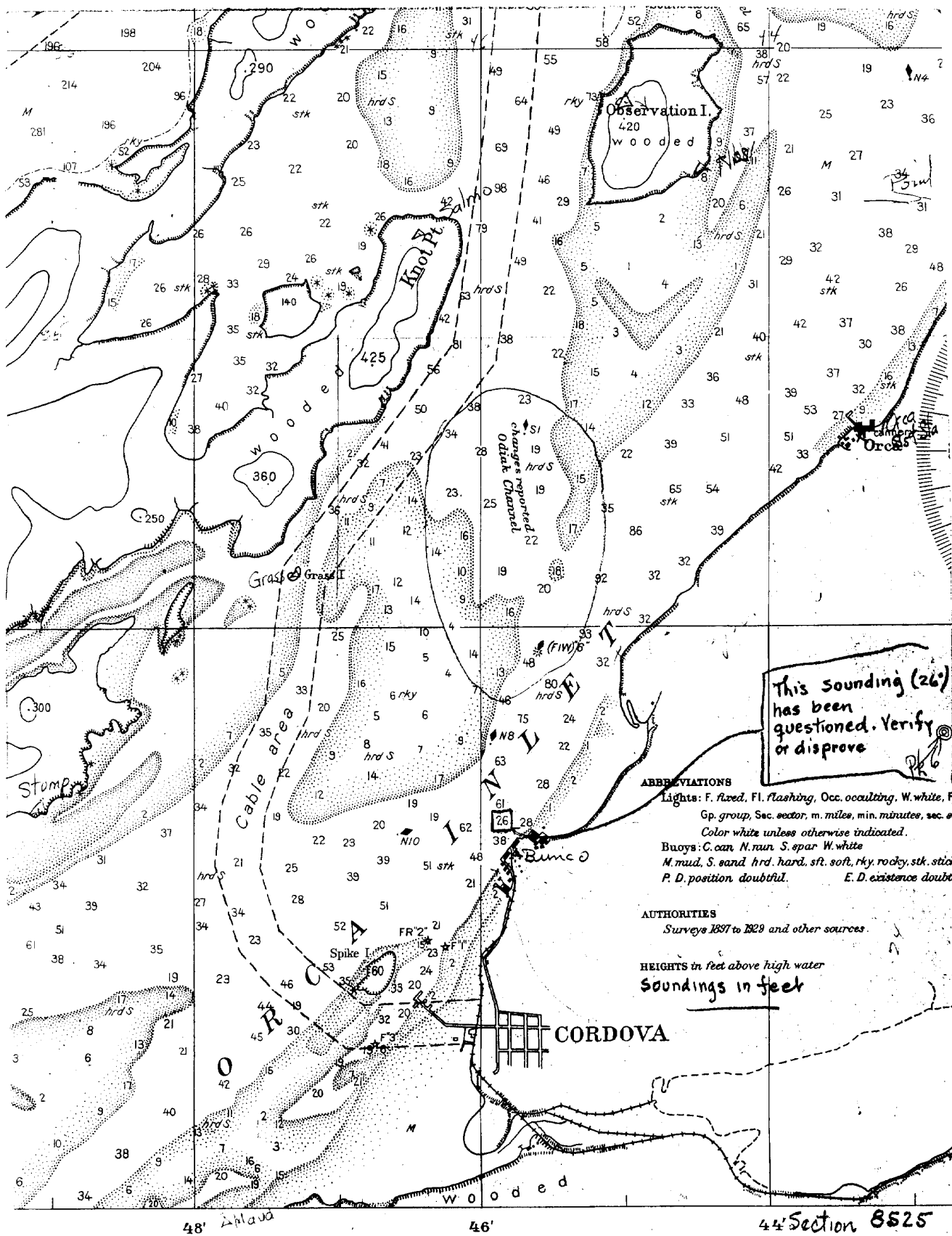
9. The field drafting, as well as the character and scope of the surveying, are excellent.

10. Reviewed by E.P. Keller, January, 1931

7. A comparison of H. 5035 with H. 2940 shows that all the curves defining the middle ground have moved northward from base-fourth mile or more, while extensive scouring has taken place to form the channel between the middle ground and Grass I.

If the shoaling noted in paragraph 5 also continues northward it will threaten the southern entrance to Odiak Channel.

8. It will be necessary to resurvey the locality at intervals to enable the chart to represent actual conditions. Future surveys should include the channel west of the middle ground as it is quite possible that it will be deepened and straightened at the same time that Odiak Channel may be closed. App. A.M. Sobieralski



This sounding (26) has been questioned. Verify or disprove

ABBREVIATIONS

Lights: F. fixed, Fl. flashing, Occ. occulting, W. white, F. Gp. group, Sec. sector, m. miles, min. minutes, sec. a. Color white unless otherwise indicated.
 Buoys: C. can. N. nun. S. spar. W. white
 M. mud. S. sand. hrd. hard. sft. soft. rky. rocky. stk. stick.
 P. D. position doubtful. E. D. existence doubtful.

AUTHORITIES

Surveys 1887 to 1889 and other sources.

HEIGHTS in feet above high water
 Soundings in feet